

WHAT IS CLAIMED IS:

1. A data recording method for recording digital data to a recording medium, comprising the steps of:

generating independent write identification information for each recording of the digital data;

encrypting data identification information of the digital data and data control information by the use of the write identification information; and

recording at least the encrypted data identification information and data control information, and the write identification information to the recording medium.

2. The data recording method as set forth in Claim 1, wherein the digital data is encrypted by the data identification information, and the encrypted digital data is recorded to the recording medium along with the encrypted data identification information and data control information, and the write identification information.

3. The data recording method as set forth in Claim 1, wherein the data control information includes copy control information for the digital data.

4. The data recording method as set forth in Claim 1, wherein the encrypted data identification information and data control information, and the write identification information are encrypted by the use of recording medium identification information peculiar to the recording medium and recorded to the recording medium.

5. The data recording method as set forth in Claim 1, wherein a data processing unit for encrypting the data identification information and data control information and a data recording unit for recording data to the recording medium are mounted separately, and the write identification information is generated at the data recording unit, and the generated write identification information is encrypted and transmitted to the data processing unit.

6. A data recording apparatus for recording digital data to a recording medium, comprising:

means for generating independent write identification information for each recording of the digital data;

means for encrypting data identification information of the digital data and data control information by the use of the write identification information; and

means for recording at least the encrypted data identification information and data control information, and the write identification information to the recording medium.

7. The data recording apparatus as set forth in Claim 6, wherein the digital data is encrypted by the data identification information, and the encrypted digital data is recorded to the recording medium along with the encrypted data identification information and data control information, and the write identification information.

8. The data recording apparatus as set forth in Claim 6, wherein the data control information includes copy control information for the digital data.

9. The data recording apparatus as set forth in Claim 6, wherein the encrypted data identification information and data control information, and the write identification information are encrypted by the use of recording medium identification information peculiar to the recording medium and recorded to the recording medium.

10. A data recording and/or reproducing system which has a data processing apparatus for encrypting data identification information of digital data and data control information, and a data recording and/or reproducing apparatus for recording the encrypted data identification information and data control information from the data processing apparatus to a recording medium,

wherein the data recording and/or reproducing apparatus has means for generating independent write identification information for each recording of the digital data, and means for recording the encrypted data from the data processing apparatus and write identification information to the recording medium, and

wherein the data processing apparatus encrypts the data identification information of the digital data and data control information by the use of the write identification information from the data recording and/or reproducing apparatus, and transmits the encrypted data to the data recording and/or reproducing apparatus.

11. The data recording and/or reproducing system as set forth in Claim 10, wherein the digital data is encrypted by the data identification information, and the

data recording and/or reproducing apparatus records the encrypted digital data to the recording medium along with the encrypted data identification information and data control information, and the write identification information.

12. The data recording and/or reproducing system as set forth in Claim 10, wherein the data control information includes copy control information for the digital data.

13. The data recording and/or reproducing system as set forth in Claim 10, wherein the data recording and/or reproducing apparatus encrypts the encrypted data identification information and data control information from the data processing apparatus, and the write identification information by the use of recording medium identification information peculiar to the recording medium, and records the encrypted data to the recording medium.

14. The data recording and/or reproducing system as set forth in Claim 10, wherein the data recording and/or reproducing apparatus authenticates the data processing apparatus when transmitting the write identification information thereto, and encrypts the write identification information and transmits the encrypted data to the data processing apparatus when it is proved to be authorized.

15. A data reproducing method for reproducing digital data from a recording medium, comprising the steps of:

reproducing encrypted data identification information and data control information, and write identification information, which are encrypted by the use of

recording medium identification information from the recording medium;

decrypting the encrypted data identification information and data control information by the use of the write identification information, and taking out the data identification information of the digital data and data control information.

16. The data reproducing method as set forth in Claim 15, wherein the digital data is encrypted by the data identification information and recorded to the recording medium, and the encrypted digital data is reproduced from the recording medium along with the encrypted data identification information and data control information, and the write identification information.

17. The data reproducing method as set forth in Claim 15, wherein the encrypted data identification information and data control information, and the write identification information are encrypted by the use of the recording medium identification information peculiar to the recording medium and recorded to the recording medium, and the recording medium identification information is reproduced from the recording medium, and the data encrypted by the recording medium identification information are decrypted by the use of the recording medium identification information, and the encrypted data identification information and data control information, and the write identification information are taken out.

18. The data reproducing method as set forth in Claim 15, wherein a data processing unit for encrypting the data identification information and data control

information and a data recording unit for recording data to the recording medium are mounted separately, and the write identification information is generated at the data recording unit, and the generated write identification information is encrypted and transmitted to the data processing unit.

19. A data reproducing apparatus for reproducing digital data from a recording medium, comprising:

means for reproducing encrypted data identification information of the digital data and data control information which are encrypted by the use of independent write identification information for each recording of the digital data, and the write identification information from the recording medium;

means for decrypting the encrypted data identification information and data control information by the use of the write identification information, and taking out the data identification information and data control information.

20. The data reproducing apparatus as set forth in Claim 19, wherein the digital data is encrypted by the data identification information and recorded to the recording medium, and the encrypted digital data is reproduced from the recording medium along with the encrypted data identification information and data control information, and the write identification information.

21. The data reproducing apparatus as set forth in Claim 20, wherein the encrypted data identification information and data control information, and the write identification information are encrypted by the use of the recording medium

identification information peculiar to the recording medium and recorded to the recording medium, and the recording medium identification information is reproduced from the recording medium, and the data encrypted by the recording medium identification information are decrypted by the use of the recording medium identification information, and the encrypted data identification information and data control information, and the write identification information are taken out.

22. A data recording and/or reproducing system which has a data recording and/or reproducing apparatus for reproducing encrypted data which are encrypted by the use of independent write identification information for each recording of digital data from a recording medium, and a data processing apparatus for decrypting the encrypted data and taking out data identification information of the digital data and data control information,

wherein the data recording and/or reproducing apparatus has means for reproducing the write identification information and encrypted data from the recording medium, and means for transmitting the reproduced data to the data processing apparatus, and

wherein the data processing apparatus decrypts the encrypted data which are encrypted by the use of the write identification information from the data recording and/or reproducing apparatus, and takes out the data identification information of the digital data and data control information.

23. The data recording and/or reproducing system as set forth in Claim 22, wherein the digital data is encrypted by the data identification information and recorded to the recording medium, and the data recording and/or reproducing apparatus reproduces the encrypted digital data from the recording medium along with the encrypted data identification information and data control information, and the write identification information.

24. The data recording and/or reproducing system as set forth in Claim 22, wherein the encrypted data identification information and data control information, and the write identification information are encrypted by the use of the recording medium identification information peculiar to the recording medium and recorded to the recording medium, and the recording medium identification information is reproduced from the recording medium, and the data encrypted by the recording medium identification information are decrypted by the use of the recording medium identification information, and the encrypted data identification information and data control information, and the write identification information are taken out.